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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/319,156	11/02/1999	GLAUCIA PARANHOS-BACCALA	103514	2490
25944 7590 05/13/2009 OLIFF & BERRIDGE, PLC P.O. BOX 320850 ALEXANDRIA, VA 22320-4850				
EXAMINER				
PARKIN, JEFFREY S				
ART UNIT		PAPER NUMBER		
1648				
MAIL DATE		DELIVERY MODE		
05/13/2009		PAPER		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

09/319,156

Applicant(s)

PARANHOS-BACCALA ET AL.

Examiner

Jeffrey S. Parkin

Art Unit

1648

Period for Reply -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 03 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 September 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1, 7, 9, 14, 15, 26, 60-64 and 66 is/are pending in the application.
- 4a) Of the above claim(s) 26 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1, 7, 9, 14, 15, 60-64 and 66 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 07 November 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☒ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

Detailed Office Action

Status of the Claims

As set forth in the advisory action dated 11 December, 2008, the finality of the final rejection dated 27 March, 2008, has been withdrawn. The amendment-after-final filed 29 September, 2008, has been entered. Claims 1, 7, 9, 14, 15, 26, 60-64, and 66 are pending in the instant application. Claim 26 stands withdrawn from further consideration by the examiner, pursuant to 37 C.F.R. § 1.142(b), as being drawn to a non-elected invention (see the restriction requirement mailed 16 February, 2001).

35 U.S.C. § 112, Second Paragraph

The following is a quotation of the second paragraph of 35 U.S.C. § 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

The previous rejection of claims 1, 7, 14, 15, and 60-64 under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention, is hereby withdrawn in response to applicants' amendment.

35 U.S.C. § 112, First Paragraph

The following is a quotation of the first paragraph of 35 U.S.C. § 112:

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Docket No.: 103514

Applicants: Paranhos-Baccala, G., et al.

Filing Date: 11/02/99

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Written Description

The previous rejection of claims 1, 7, 9, 14, 15, and 60-64 under 35 U.S.C. § 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention, is hereby withdrawn in view of applicants' amendment.

35 U.S.C. § 102(b)

The following is a quotation of the appropriate paragraphs of 35 U.S.C. § 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

The previous rejection of claims 1, 7, 14, 15, and 60 under 35 U.S.C. § 102(b) as being clearly anticipated by Boehringer Mannheim (1994), is hereby withdrawn in response to applicants' amendment.

35 U.S.C. § 119

Acknowledgment is hereby made of applicants' claim for foreign priority based on FR 97/08816 filed 07 July, 1997. It is noted, however, that applicants have **NOT** filed a certified copy **AND** English translation of this application as required by 35 U.S.C. § 119(b). Accordingly, the foreign priority claim has **NOT** been entered.

35 U.S.C. § 102(e)

The following is a quotation of the appropriate paragraphs of 35 U.S.C. § 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1, 7, 9, 14, 15, 60, 61, 63, and 66 are rejected under 35 U.S.C. § 102(e) as being clearly anticipated by Perron et al. (2003, U.S. Patent No. 6,582,703 B2).¹ Perron and associates provide isolated polynucleotides that are identical to SEQ ID NOS. 6, 9, 10, and 12 (see SEQ ID NOS.: 102, 105, 106, and 108,

1. The earliest effective filing date of U.S. Patent No. 6,582,703 B2 is 26 November, 1997.

respectively). Thus, this teaching meets all of the claimed limitations.

35 U.S.C. § 103(a)

The following is a quotation of 35 U.S.C. § 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 62 and 64 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Perron et al. (2003, U.S. Patent No. 6,582,703 B2). Claim 62 is directed toward isolated genomic DNA comprising SEQ ID NOS. 6, 9, or 12 and claim 64 is directed toward an expression vector comprising the claimed SEQ ID NOS. As set forth *supra*, Perron and associates provide isolated polynucleotides that are identical to SEQ ID NOS. 6, 9, and 12 (see SEQ ID NOS.: 102, 105, and 108, respectively). This teaching does not disclose isolated genomic DNA comprising these sequences or expression vectors comprising said sequences. However, it would have been *prima facie* obvious to one of ordinary skill in the art at the time of the invention to isolate the claimed retroviral sequences from a number of sources (e.g., genomic DNA comprising proviral copies of the retrovirus) to facilitate further genotypic/phenotypic

characterization of the virus. One of ordinary skill in the art would have also been motivated to place the claimed sequences in an expression vector to encode the corresponding protein. The protein would obviously be useful for the generation of a number of immunological, biochemical and diagnostic reagents.

Correspondence

Any inquiry concerning this communication should be directed to Jeffrey S. Parkin, Ph.D., whose telephone number is (571) 272-0908. The examiner can normally be reached Monday through Thursday from 10:30 AM to 9:00 PM. A message may be left on the examiner's voice mail service. If attempts to reach the examiner are unsuccessful, the examiner's supervisor, Larry R. Helms, can be reached at (571) 272-0832. Direct general status inquiries to the Technology Center 1600 receptionist at (571) 272-1600. Informal communications may be submitted to the Examiner's RightFAX account at (571) 273-0908.

Applicants are reminded that the United States Patent and Trademark Office (Office) requires most patent related correspondence to be: a) faxed to the Central FAX number (571-273-8300) (updated as of July 15, 2005), b) hand carried or delivered to the Customer Service Window (now located at the Randolph Building, 401 Dulany Street, Alexandria, VA 22314), c) mailed to the mailing address set forth in 37 C.F.R. § 1.1 (e.g., P.O. Box 1450, Alexandria, VA 22313-1450), or d) transmitted to the Office using the Office's Electronic Filing System. This notice replaces all prior Office notices specifying a specific fax number or hand carry address for certain patent related correspondence. For further information refer to the Updated Notice of Centralized Delivery and Facsimile Transmission Policy for Patent Related Correspondence, and Exceptions Thereto, 1292 Off. Gaz. Pat. Office 186 (March 29, 2005).

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on

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Applicants: Paranhos-Baccala, G., et al.

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access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Respectfully,

/Jeffrey S. Parkin/

Jeffrey S. Parkin, Ph.D.
Primary Examiner, Art Unit 1648

10 May, 2009

Application No.: 09/319,156

Docket No.: 103514

Applicants: Paranhos-Baccala, G., et al.

Filing Date: 11/02/99

**Appendix A: Sequence Search Results for
U.S. Serial No. 09/319,156**

SEQ ID NO.: 6

RESULT 1
US-08-979-847B-102
; Sequence 102, Application US/08979847B
; Patent No. 6582703
; GENERAL INFORMATION:
; APPLICANT: PERRON, HERVE
; BESEME, FREDERIC
; BEDIN, FREDERIC
; PARANHOS-BACCALA, GLAUCIA
; KOMURIAN-PRADEL, FLORENCE
; JOLIVET-REYNAUD, COLETTE
; MANDRAND, BERNARD
; GARSON, JEREMY
; TUKE, PHILIP
; TITLE OF INVENTION: VIRAL MATERIAL AND NUCLEOTIDE FRAGMENTS
; ASSOCIATED WITH MULTIPLE SCLEROSIS, FOR
DIAGNOSTIC,
; PROPHYLACTIC AND THERAPEUTIC PURPOSES
; NUMBER OF SEQUENCES: 210
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: OLIFF & BERRIDGE, PLC
; STREET: P.O. BOX 19928
; CITY: ALEXANDRIA
; STATE: VA
; COUNTRY: USA
; ZIP: 22320
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/979,847B
; FILING DATE: 26-No. 6582703-1997
; CLASSIFICATION:
; ATTORNEY/AGENT INFORMATION:
; NAME: BERRIDGE, WILLIAM P.
; REGISTRATION NUMBER: 30,024
; REFERENCE/DOCKET NUMBER: WPB 39046A
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 703-836-6400
; TELEFAX: 703-836-2787
; INFORMATION FOR SEQ ID NO: 102:
; SEQUENCE CHARACTERISTICS:

Application No.: 09/319,156

Docket No.: 103514

Applicants: Paranhos-Baccala, G., et al.

Filing Date: 11/02/99

; LENGTH: 635 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: cDNA
; SEQUENCE DESCRIPTION: SEQ ID NO: 102:
US-08-979-847B-102

Query Match 100.0%; Score 635; DB 4; Length 635;
Best Local Similarity 100.0%; Pred. No. 2e-203;
Matches 635; Conservative 0; Mismatches 0; Indels 0;
Gaps 0;

```
Qy      1  CCCTGTATCTTTAACTCCTTGTTAAGTTGTCTCTCCAGAATCAAACTGTAAAACTA 60
        |||
Db      1  CCCTGTATCTTTAACTCCTTGTTAAGTTGTCTCTCCAGAATCAAACTGTAAAACTA 60

Qy     61  CAAATTGTTCTTCAAATGGAGCACCAGATGGAGTCCATGACTAAGATCCACCGTGGACCC 120
        |||
Db     61  CAAATTGTTCTTCAAATGGAGCACCAGATGGAGTCCATGACTAAGATCCACCGTGGACCC 120

Qy    121  CTGGACCGGCTGTAGCCCATGCTCCGATGTTAATGACATTGAAGGCACCCCTCCCAG 180
        |||
Db    121  CTGGACCGGCTGTAGCCCATGCTCCGATGTTAATGACATTGAAGGCACCCCTCCCAG 180

Qy    181  GAAATCTCAACTGCACAACCCCTACTATGCCCAATTACGCGGGAAGCAGTTAGAGCGGT 240
        |||
Db    181  GAAATCTCAACTGCACAACCCCTACTATGCCCAATTACGCGGGAAGCAGTTAGAGCGGT 240

Qy    241  CATCAGCCAACCTCCCAACAGCACTTGGGTTTTCTGTTGAGAGGGGGGACTGAGAGAC 300
        |||
Db    241  CATCAGCCAACCTCCCAACAGCACTTGGGTTTTCTGTTGAGAGGGGGGACTGAGAGAC 300

Qy    301  AGGACTAGCTGGATTTCCTAGGCCAACGAAGAATCCCTAAGCCTAGCTGGGAAGGTGACT 360
        |||
Db    301  AGGACTAGCTGGATTTCCTAGGCCAACGAAGAATCCCTAAGCCTAGCTGGGAAGGTGACT 360

Qy    361  GCATCCACTCTAAACATGGGGCTTGCAACTTAGCTCACACCCGACCAATCAGAGAGCTC 420
        |||
Db    361  GCATCCACTCTAAACATGGGGCTTGCAACTTAGCTCACACCCGACCAATCAGAGAGCTC 420

Qy    421  ACTAAATGCTAATTAGGCAAAAATAGGAGGTAAGAATAAGCAATCATCTATTGCCTG 480
        |||
Db    421  ACTAAATGCTAATTAGGCAAAAATAGGAGGTAAGAATAAGCAATCATCTATTGCCTG 480

Qy    481  AGAGCACACGCGGAGGGACAAGGATCGGGATATAAACCCAGGCATTTCGAGCCGGCAACGG 540
        |||
Db    481  AGAGCACACGCGGAGGGACAAGGATCGGGATATAAACCCAGGCATTTCGAGCCGGCAACGG 540

Qy    541  CAACCCCTTTGGGTCCCTCCCTTTGTATGGGCGCTCTGTTTTCACTCTATTTCACCTCT 600
        |||
Db    541  CAACCCCTTTGGGTCCCTCCCTTTGTATGGGCGCTCTGTTTTCACTCTATTTCACCTCT 600

Qy    601  ATTAATCTTGCAACTGAAAAAAAAAAAAAAAAAAAA 635
        |||
Db    601  ATTAATCTTGCAACTGAAAAAAAAAAAAAAAAAAAA 635
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Docket No.: 103514

Applicants: Paranhos-Baccala, G., et al.

Filing Date: 11/02/99

SEQ ID NO.: 9

RESULT 1
US-08-979-847B-105
; Sequence 105, Application US/08979847B
; Patent No. 6582703
; GENERAL INFORMATION:
; APPLICANT: PERRON, HERVE
; BESEME, FREDERIC
; BEDIN, FREDERIC
; PARANHOS-BACCALA, GLAUCIA
; KOMURIAN-PRADEL, FLORENCE
; JOLIVET-REYNAUD, COLETTE
; MANDRAND, BERNARD
; GARSON, JEREMY
; TUKE, PHILIP
; TITLE OF INVENTION: VIRAL MATERIAL AND NUCLEOTIDE FRAGMENTS
; ASSOCIATED WITH MULTIPLE SCLEROSIS, FOR
DIAGNOSTIC, PROPHYLACTIC AND
; THERAPEUTIC PURPOSES
; NUMBER OF SEQUENCES: 210
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: OLIFF & BERRIDGE, PLC
; STREET: P.O. BOX 19928
; CITY: ALEXANDRIA
; STATE: VA
; COUNTRY: USA
; ZIP: 22320
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/979,847B
; FILING DATE: 26-No. 6582703-1997
; CLASSIFICATION:
; ATTORNEY/AGENT INFORMATION:
; NAME: BERRIDGE, WILLIAM P.
; REGISTRATION NUMBER: 30,024
; REFERENCE/DOCKET NUMBER: WPB 39046A
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 703-836-6400
; TELEFAX: 703-836-2787
; INFORMATION FOR SEQ ID NO: 105:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 1481 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single

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Docket No.: 103514

Applicants: Paranhos-Baccala, G., et al.

Filing Date: 11/02/99

; TOPOLOGY: linear
; MOLECULE TYPE: cDNA
; SEQUENCE DESCRIPTION: SEQ ID NO: 105:
US-08-979-847B-105

Query Match 100.0%; Score 1481; DB 4; Length 1481;
Best Local Similarity 100.0%; Pred. No. 0;
Matches 1481; Conservative 0; Mismatches 0; Indels 0;
Gaps 0;

```
Qy      1 ATGGCCCTCCCTTATCATACTTTTCTCTTTACTGTTCCTTACCCCTTCGCTCTCACT 60
      |||
Db      1 ATGGCCCTCCCTTATCATACTTTTCTCTTTACTGTTCCTTACCCCTTCGCTCTCACT 60

Qy     61 GCACCCCTCCATGCTGCTGTACAACCACTAGCTCCCTTACCAAGAGTTTCTATGAAGA 120
      |||
Db     61 GCACCCCTCCATGCTGCTGTACAACCACTAGCTCCCTTACCAAGAGTTTCTATGAAGA 120

Qy    121 ACGCGGCTTCCTGGAAATATTGATGCCCATCATATAGGAGTTTATCTAAGGGAACTCC 180
      |||
Db    121 ACGCGGCTTCCTGGAAATATTGATGCCCATCATATAGGAGTTTATCTAAGGGAACTCC 180

Qy    181 ACCTTCACTGCCACACCCATATGCCCGCAACTGCTATAACTCTGCCACTCTTTGCATG 240
      |||
Db    181 ACCTTCACTGCCACACCCATATGCCCGCAACTGCTATAACTCTGCCACTCTTTGCATG 240

Qy    241 CATGCAAACTACTCATTATTGGACAGGGAATGATTAACTCCTAGTTGTCTGGAGGACTT 300
      |||
Db    241 CATGCAAACTACTCATTATTGGACAGGGAATGATTAACTCCTAGTTGTCTGGAGGACTT 300

Qy    301 GGAGCCACTGTCTGTTGGACTTACTTCACCCATACCAAGTATGTCTGATGGGGGTGGAATT 360
      |||
Db    301 GGAGCCACTGTCTGTTGGACTTACTTCACCCATACCAAGTATGTCTGATGGGGGTGGAATT 360

Qy    361 CAAGGTGAGGCAAGAGAAAAACAAGTAAAGGAAGCAATCTCCCACTGACCCGGGACAT 420
      |||
Db    361 CAAGGTGAGGCAAGAGAAAAACAAGTAAAGGAAGCAATCTCCCACTGACCCGGGACAT 420

Qy    421 AGCACCCCTAGCCCTACAAAGGACTAGTTCTCTCAAACTACATGAAACCCCTCCGTACC 480
      |||
Db    421 AGCACCCCTAGCCCTACAAAGGACTAGTTCTCTCAAACTACATGAAACCCCTCCGTACC 480

Qy    481 CATACTCGCTGGTGAGCCTATTAAATACCACCCCTCACTCGGCTCCATGAGGCTCTAGCC 540
      |||
Db    481 CATACTCGCTGGTGAGCCTATTAAATACCACCCCTCACTCGGCTCCATGAGGCTCTAGCC 540

Qy    541 CAAAACCTACTAACTGTTGGATGTGCTCCCCCTGCACCTCAGGCCATACATTTCAATC 600
      |||
Db    541 CAAAACCTACTAACTGTTGGATGTGCTCCCCCTGCACCTCAGGCCATACATTTCAATC 600

Qy    601 CTGTTCTGGAACAATGGAACAACCTTCAGCACAGAAATAAACACCACTTTCCGTTTTAGTA 660
      |||
Db    601 CTGTTCTGGAACAATGGAACAACCTTCAGCACAGAAATAAACACCACTTTCCGTTTTAGTA 660

Qy    661 GGACCTCTTGTTTCCAATCTGGAATAACCCATACCTCAAACCTCACCTGTGTAAAAATT 720
      |||
Db    661 GGACCTCTTGTTTCCAATCTGGAATAACCCATACCTCAAACCTCACCTGTGTAAAAATT 720
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Docket No.: 103514

Applicants: Paranhos-Baccala, G., et al.

Filing Date: 11/02/99

SEQ ID NO.: 10

RESULT 1
US-08-979-847B-106
; Sequence 106, Application US/08979847B
; Patent No. 6582703
; GENERAL INFORMATION:
; APPLICANT: PERRON, HERVE
; BESEME, FREDERIC
; BEDIN, FREDERIC
; PARANHOS-BACCALA, GLAUCIA
; KOMURIAN-PRADEL, FLORENCE
; JOLIVET-REYNAUD, COLETTE
; MANDRAND, BERNARD
; GARSON, JEREMY
; TUKE, PHILIP
; TITLE OF INVENTION: VIRAL MATERIAL AND NUCLEOTIDE FRAGMENTS
; ASSOCIATED WITH MULTIPLE SCLEROSIS, FOR
DIAGNOSTIC, PROPHYLACTIC AND
; THERAPEUTIC PURPOSES
; NUMBER OF SEQUENCES: 210
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: OLIFF & BERRIDGE, PLC
; STREET: P.O. BOX 19928
; CITY: ALEXANDRIA
; STATE: VA
; COUNTRY: USA
; ZIP: 22320
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/979,847B
; FILING DATE: 26-No. 6582703-1997
; CLASSIFICATION:
; ATTORNEY/AGENT INFORMATION:
; NAME: BERRIDGE, WILLIAM P.
; REGISTRATION NUMBER: 30,024
; REFERENCE/DOCKET NUMBER: WPB 39046A
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 703-836-6400
; TELEFAX: 703-836-2787
; INFORMATION FOR SEQ ID NO: 106:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 493 amino acids
; TYPE: amino acid
; STRANDEDNESS: single

Application No.: 09/319,156

Docket No.: 103514

Applicants: Paranhos-Baccala, G., et al.

Filing Date: 11/02/99

; TOPOLOGY: linear
; MOLECULE TYPE: peptide
; SEQUENCE DESCRIPTION: SEQ ID NO: 106:
US-08-979-847B-106

Query Match 99.9%; Score 2632; DB 4; Length 493;
Best Local Similarity 100.0%; Pred. No. 2.8e-262;
Matches 493; Conservative 0; Mismatches 0; Indels 0;
Gaps 0;

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Qy      1 MALPYHTFLFTVLLPPFALTAPPFCCCTTSSSPYQEFIXRTRLPGNIDAPSYRSLSGKMS 60
      |||
Db      1 MALPYHTFLFTVLLPPFALTAPPFCCCTTSSSPYQEFIXRTRLPGNIDAPSYRSLSGKMS 60

Qy      61 TFTARTHMPRNCYNSATLCMHANTHYWTGKMINPSCPGGLGATVCWTYFTHTSMSDGGGI 120
      |||
Db      61 TFTARTHMPRNCYNSATLCMHANTHYWTGKMINPSCPGGLGATVCWTYFTHTSMSDGGGI 120

Qy      121 QGQAREKQVKEAISQLTRGHSTSPYKGLVLSKLHETLRTHTRIVSLFNTTLRLHEVSA 180
      |||
Db      121 QGQAREKQVKEAISQLTRGHSTSPYKGLVLSKLHETLRTHTRIVSLFNTTLRLHEVSA 180

Qy      181 QNPTNCNMCLPLHFRPYISIPVPEQMNINFSTEINTTSVLVGLVPLVSNLEIHTSNLTCVKF 240
      |||
Db      181 QNPTNCNMCLPLHFRPYISIPVPEQMNINFSTEINTTSVLVGLVPLVSNLEIHTSNLTCVKF 240

Qy      241 SNTIDTSSQCIRWVTPPTRIVCLPSGIFVCGTSAYHCLNGSSESMCFLSFLVPPMTIY 300
      |||
Db      241 SNTIDTSSQCIRWVTPPTRIVCLPSGIFVCGTSAYHCLNGSSESMCFLSFLVPPMTIY 300

Qy      301 TEQDLYNHVVPKPHNKRVPILPFVIRAGVLGRLGTGIGSITTSTQFYKLSQEQINGDMEQ 360
      |||
Db      301 TEQDLYNHVVPKPHNKRVPILPFVIRAGVLGRLGTGIGSITTSTQFYKLSQEQINGDMEQ 360

Qy      361 VTDLSVTLQDQLNSLAADVQLNRRALDLLTAKRGGTCLFLGEERCYYVQSRIVTEKVE 420
      |||
Db      361 VTDLSVTLQDQLNSLAADVQLNRRALDLLTAKRGGTCLFLGEERCYYVQSRIVTEKVE 420

Qy      421 IRDRIQCRAEELQNTERWGLLSQWMPFVLPFLGPLAALILLLLFGPCIFNLLVKFVSSRI 480
      |||
Db      421 IRDRIQCRAEELQNTERWGLLSQWMPFVLPFLGPLAALILLLLFGPCIFNLLVKFVSSRI 480

Qy      481 EAVKLQMVLMQMEP 493
      |||
Db      481 EAVKLQMVLMQMEP 493
```

Application No.: 09/319,156

Docket No.: 103514

Applicants: Paranhos-Baccala, G., et al.

Filing Date: 11/02/99

SEQ ID NO.: 12

RESULT 1
US-08-979-847B-108
; Sequence 108, Application US/08979847B
; Patent No. 6582703
; GENERAL INFORMATION:
; APPLICANT: PERRON, HERVE
; BESEME, FREDERIC
; BEDIN, FREDERIC
; PARANHOS-BACCALA, GLAUCIA
; KOMURIAN-PRADEL, FLORENCE
; JOLIVET-REYNAUD, COLETTE
; MANDRAND, BERNARD
; GARSON, JEREMY
; TUKE, PHILIP
; TITLE OF INVENTION: VIRAL MATERIAL AND NUCLEOTIDE FRAGMENTS
; ASSOCIATED WITH MULTIPLE SCLEROSIS, FOR
DIAGNOSTIC, PROPHYLACTIC AND
; THERAPEUTIC PURPOSES
; NUMBER OF SEQUENCES: 210
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: OLIFF & BERRIDGE, PLC
; STREET: P.O. BOX 19928
; CITY: ALEXANDRIA
; STATE: VA
; COUNTRY: USA
; ZIP: 22320
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/979,847B
; FILING DATE: 26-No. 6582703-1997
; CLASSIFICATION:
; ATTORNEY/AGENT INFORMATION:
; NAME: BERRIDGE, WILLIAM P.
; REGISTRATION NUMBER: 30,024
; REFERENCE/DOCKET NUMBER: WPB 39046A
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 703-836-6400
; TELEFAX: 703-836-2787
; INFORMATION FOR SEQ ID NO: 108:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 1329 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single

Application No.: 09/319,156

Docket No.: 103514

Applicants: Paranhos-Baccala, G., et al.

Filing Date: 11/02/99

; TOPOLOGY: linear
; MOLECULE TYPE: cDNA
; SEQUENCE DESCRIPTION: SEQ ID NO: 108:
US-08-979-847B-108

Query Match 99.8%; Score 1326; DB 4; Length 1329;
Best Local Similarity 100.0%; Pred. No. 0;
Matches 1329; Conservative 0; Mismatches 0; Indels 0;
Gaps 0;

Qy	1	TCAAAATCGAAGAGCTTTAGACTTGCTAACCGCCAAAAGAGGGGAACTGTTATTTTT	60
Db	1	TCAAAATCGAAGAGCTTTAGACTTGCTAACCGCCAAAAGAGGGGAACTGTTATTTTT	60
Qy	61	AGGGGAAGAATGCTGTTAGTATGTTAATCAATCTGGAATCATTACTGAGAAAGTTAAAGA	120
Db	61	AGGGGAAGAATGCTGTTAGTATGTTAATCAATCTGGAATCATTACTGAGAAAGTTAAAGA	120
Qy	121	AATTTGAGATCGAATATAATGTAGAGCAGAGGACCTTCAAAACACTGCACCTGGGGCCT	180
Db	121	AATTTGAGATCGAATATAATGTAGAGCAGAGGACCTTCAAAACACTGCACCTGGGGCCT	180
Qy	181	CCTCAGCCAATGGATGCCCTGGACTCTCCCCTTCTTAGGACCTCTAGCAGCTATAATATT	240
Db	181	CCTCAGCCAATGGATGCCCTGGACTCTCCCCTTCTTAGGACCTCTAGCAGCTATAATATT	240
Qy	241	TTTACTCCTCTTTGGACCCGTGTATCTTCAACTTCCTTGTTAAGTTTGCTCTTCCAGAAT	300
Db	241	TTTACTCCTCTTTGGACCCGTGTATCTTCAACTTCCTTGTTAAGTTTGCTCTTCCAGAAT	300
Qy	301	TGAAGCTGTAAAGCTACAAATAGTTCTTCAAATGGAAACCCAGATGCAGTCCATGACTAA	360
Db	301	TGAAGCTGTAAAGCTACAAATAGTTCTTCAAATGGAAACCCAGATGCAGTCCATGACTAA	360
Qy	361	AATCTACCGTGGACCCCTGGACCGCCTGCTAGACTATGCTCTGATGTTAATGACATTGA	420
Db	361	AATCTACCGTGGACCCCTGGACCGCCTGCTAGACTATGCTCTGATGTTAATGACATTGA	420
Qy	421	AGTCACCCCTCCCGAGGAAATCTCAACTGCACAACCCCTACTACACTCCAATTCACTAGG	480
Db	421	AGTCACCCCTCCCGAGGAAATCTCAACTGCACAACCCCTACTACACTCCAATTCACTAGG	480
Qy	481	AAGCAGTTAGAGCAGTTGTGACCCAACCTCCCCAACAGTACTTGGGTTTTCTGTTGAGA	540
Db	481	AAGCAGTTAGAGCAGTTGTGACCCAACCTCCCCAACAGTACTTGGGTTTTCTGTTGAGA	540
Qy	541	GGGTGGACTGAGAGACAGGACTAGCTGGATTTCCTAGGCTGACTAAGAAATCCNAAGCCT	600
Db	541	GGGTGGACTGAGAGACAGGACTAGCTGGATTTCCTAGGCTGACTAAGAAATCCNAAGCCT	600
Qy	601	ANCTGGGAAGGTGACCGCATCCATCTTTAAACATGGGGCTTGCAACTTAGCTCACACCCG	660
Db	601	ANCTGGGAAGGTGACCGCATCCATCTTTAAACATGGGGCTTGCAACTTAGCTCACACCCG	660
Qy	661	ACCAATCAGAGAGCTCACTAAAAATGCTAATCAGGCAAAAACAGGAGGTAAGCAATAGCC	720
Db	661	ACCAATCAGAGAGCTCACTAAAAATGCTAATCAGGCAAAAACAGGAGGTAAGCAATAGCC	720

Qy	721	AATCATCTATTGCCTGAGAGCACAGCGGGAAGGACAAGGATTGGGATATAAACTCAGGCA	780
Db	721	AATCATCTATTGCCTGAGAGCACAGCGGGAAGGACAAGGATTGGGATATAAACTCAGGCA	780
Qy	781	TTCAAGCCAGCAACAGCAACCCCTTTGGGTCCCTCCCATGTATGGGAGCTCTGTTTT	840
Db	781	TTCAAGCCAGCAACAGCAACCCCTTTGGGTCCCTCCCATGTATGGGAGCTCTGTTTT	840
Qy	841	CACCTCTATTTCACTCTATTAATCATGCAACTGCACCTCTTCTGGTCCGTGTTTTTATGG	900
Db	841	CACCTCTATTTCACTCTATTAATCATGCAACTGCACCTCTTCTGGTCCGTGTTTTTATGG	900
Qy	901	CTCAAGCTGAGCTTTTGTTCGCCATCCACCACTGCTGTTTGCCACCGTCACAGACCCGCT	960
Db	901	CTCAAGCTGAGCTTTTGTTCGCCATCCACCACTGCTGTTTGCCACCGTCACAGACCCGCT	960
Qy	961	GCTGACTTCCATCCCTTTGGATCCAGCAGAGTGTCACCTGTGCTCCTGATCCAGCGAGGT	1020
Db	961	GCTGACTTCCATCCCTTTGGATCCAGCAGAGTGTCACCTGTGCTCCTGATCCAGCGAGGT	1020
Qy	1021	ACCCATTGCCACTCCCGATCAGGCTAAAGGCTTGCCATTGTTCTGCATGGCTAAGTGCC	1080
Db	1021	ACCCATTGCCACTCCCGATCAGGCTAAAGGCTTGCCATTGTTCTGCATGGCTAAGTGCC	1080
Qy	1081	TGGGTTTGTCTAATAGAAGTGAACACTGGTCACTGGGTTCCATGGTTCTCTTCCATGAC	1140
Db	1081	TGGGTTTGTCTAATAGAAGTGAACACTGGTCACTGGGTTCCATGGTTCTCTTCCATGAC	1140
Qy	1141	CCACGGCTTCTAATAGAGCTATAACACTCACCGCATGGCCCAAGATTCCATTCTTGGTA	1200
Db	1141	CCACGGCTTCTAATAGAGCTATAACACTCACCGCATGGCCCAAGATTCCATTCTTGGTA	1200
Qy	1201	TCTGTGAGGCCAAGAACCCAGGTCAGAGAANGTGAGGCTTGCCACCATTTTGGGAAGTGG	1260
Db	1201	TCTGTGAGGCCAAGAACCCAGGTCAGAGAANGTGAGGCTTGCCACCATTTTGGGAAGTGG	1260
Qy	1261	CCCACTGCCATTTTGGTAGCGGCCACCAACCATCTTGGGAGCTGTGGGAGCAAGGATCCC	1320
Db	1261	CCCACTGCCATTTTGGTAGCGGCCACCAACCATCTTGGGAGCTGTGGGAGCAAGGATCCC	1320
Qy	1321	CCAGTAACA	1329
Db	1321	CCAGTAACA	1329